

Title (en)  
SPARK PLUG FOR INTERNAL COMBUSTION ENGINE

Title (de)  
ZÜNDKERZE FÜR EINEN VERBRENNUNGSMOTOR

Title (fr)  
BOUGIE POUR MOTEUR A COMBUSTION INTERNE

Publication  
**EP 2333918 A4 20140212 (EN)**

Application  
**EP 09817648 A 20090915**

Priority  
• JP 2009066078 W 20090915  
• JP 2008253955 A 20080930

Abstract (en)  
[origin: EP2333918A1] A spark plug without any noble metal chip on a ground electrode and capable of enhancing the ignition property, prolonging the life and ensuring a sufficiently high strength of the ground electrode is provided. The spark plug 1 includes a center electrode 5, an insulator 2, a metal shell 3, and a ground electrode 27. Spark discharge is provided substantially along a direction of an axis CL1 of the spark plug in a spark discharge gap 33 defined between the center electrode 5 and the ground electrode 27. The ground electrode includes a narrowed width portion 42 which has a substantially uniform width smaller than an outer diameter of a tip end surface 5F of the center electrode 5, and a widened width portion 41 having a width larger than the width of the narrowed width portion 42. When viewed from a tip end side of the spark plug in the direction of the axis CL1, a base end of the narrowed width portion 42 is located offset from the tip end surface 5F of the center electrode 5 toward the root side of the ground electrode 27. The base end of the narrowed width portion 42 is located offset from a center of the spark discharge gap toward the tip end side of the spark plug in the axial direction of the spark plug.

IPC 8 full level  
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CPC (source: EP KR US)  
**H01T 13/20** (2013.01 - KR); **H01T 13/32** (2013.01 - EP KR US); **H01T 13/39** (2013.01 - EP US)

Citation (search report)  
• [Y] JP S535629 U 19780119  
• [Y] JP 2000252039 A 20000914 - NGK SPARK PLUG CO  
• [Y] EP 0895327 A1 19990203 - NGK SPARK PLUG CO [JP]  
• [Y] JP H07135066 A 19950523 - HONDA MOTOR CO LTD  
• [YD] JP 2001307858 A 20011102 - NGK SPARK PLUG CO  
• See references of WO 2010038611A1

Cited by  
EP2814124A3

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